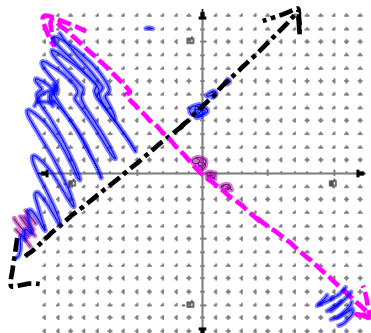


3-3 Graphing a System of Linear Inequalities

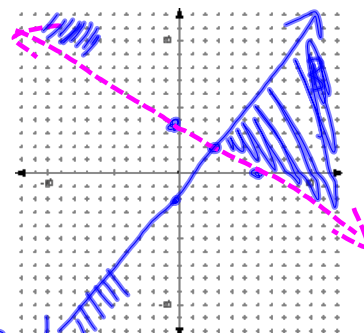
ex 1:
 $y > x + 5$
 $y < -x + 1$



ex 2:
 $2x + 3y > 12$
 $-3y \geq 6 - 4x$

$$y > -\frac{2}{3}x + 4$$

$$y \leq \frac{4}{3}x - 2$$

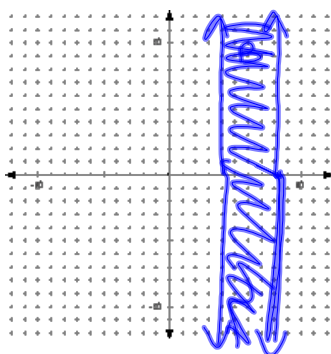


ex 3:
 $4 \leq x \leq 8$

$$x \geq 4$$

and

$$x \leq 8$$

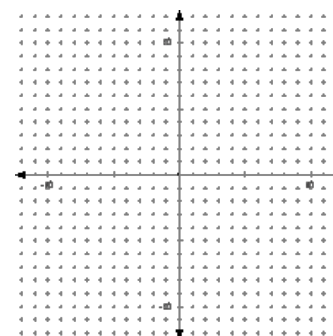


Do:

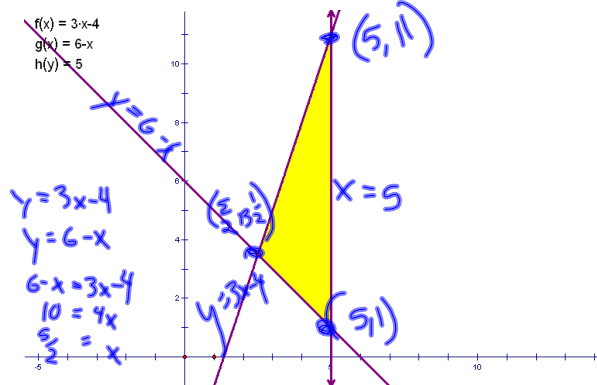
$$y \leq 3x - 4$$

$$y \geq 6 - x$$

$$x \leq 5$$



Find the corner points.

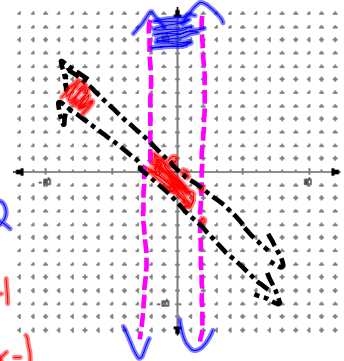


ex:

$$\begin{cases} |x| < 2 \\ |x + y| < 1 \end{cases}$$

$x < 2$ AND $x > -2$

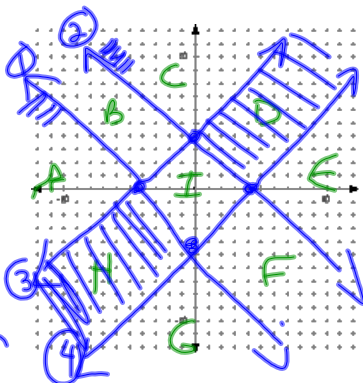
$x + y < 1$ AND $x + y > -1$
 $y < -x + 1$ $y > -x - 1$



ex:

$$\begin{cases} |x + y| \geq 4 \\ |x - y| \leq 4 \end{cases}$$

CR
 $y \geq -x + 4$ ②
 $y \leq -x - 4$ ①
 $y \geq x - 4$ ④
 $y \leq x + 4$ ③



HW

p126 12, 15, 17, 20, 21, 24, 28